

FORM PTO-1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 06000 USA	SERIAL NO.
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use several sheets if necessary)		APPLICANT David Geoffrey Brown	
		FILING DATE	GROUP 1761

10868 U.S. PTO  
09/879772  
06/12/01

U.S. PATENT DOCUMENTS

EXAM- INER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
CS	3 9 9 2 2 9 3	11/16/1976	Sawicki et al.	210	48	
	5 1 3 5 8 6 1	08/04/1992	Pavilon	435	162	
	5 2 4 4 4 7 8	09/14/1993	Jolly	95	46	
	5 2 5 4 1 4 3	10/19/1993	Anazawa et al.	95	46	
	5 4 6 4 5 4 0	11/07/1995	Friesen et al.	210	640	
	5 5 2 2 9 1 7	06/04/1996	Honda et al.	95	46	
CS	5 5 6 5 1 4 9	10/15/1996	Page et al.	261	140.1	

FOREIGN PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS														
		DOCUMENT NUMBER							DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
													YES	NO
CS		3	6	3	2	5	7	0	04/07/1988	Germany	C12N	1/00 -	X	
I		4	1	4	3	3	1	4	10/08/1992	Germany	C12FG	3/00	.	
CS		0	7	3	2	1	4	2	17.06.1998	EPO	B01D	63/02	.	

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CS	Veeramallu, U.K. et al., "The Effect of CO2 Ventilation of Kinetics and Yields of Cell-Mass and Ethanol in Batch Cultures of Zymomonas Mobilis", <i>Biotechnology Letters</i> , 1986, Vol. 8, No. 11, pp.811-816
	Voolapalli, R. K. et al., "Stability Enhancement of Anaerobic Digestion through Membrane Gas Extraction under Organic Shock Loads", <i>J. Chem. Technol. Biotechnol.</i> , 1998, 73, 153-161
	Gruber, T.H. et al., "Coupling of Production and Downstream Processing in the Continuous Rhamnolipid", <i>DECHEMA Biotechnology Conference 4</i> , VCH Verlagsgesellschaft 1990 pp 1085-1088
	Wilson, R.J.H., "A Device for Reduction of Dissolved CO2 Level in Fermenting Wort or Beer" (Brewing Research Foundation, Nufield, Surrey), <i>J. Inst. Brew.</i> , May-June 1976, Vol. 82, pp. 168-169
	Ridealgh, D., "A Touch of Froth", <i>Process Engineering</i> , November 1998, pp. 34-35
	"Economical De-gassing of Mineral Water with Sophisticated Vacuum Technology", <i>Drink Technology &amp; Marketing</i> , November 1998
	Gruber, J.D., "Carbon Dioxide-An Important Brewery Utility", <i>The Brewers Digest</i> , January 1975, pp. 44-50
	Percheron, G., "Carbon Dioxide Desorption from Fermentation Broth by Use of Oxygen Vectors", <i>Bioprocess Engineering</i> 12 (1995) 11-16, Springer-Verlag
	O'Connor-Cox, E., "Improving Yeast Handling in the Brewery Part 2: Yeast Collection, <i>Brewers' Guardian</i> , February 1998, pp.22-34
	Al-Saffar, H. B. et al., "A Comparison of Porous and Non-Porous Gas-Liquid Membrane Contactors for Gas Separation", <i>Trans IChemE</i> , Vol 75, Part A, October 1997, pp 685-692
	Sirkar, K. K., "Hollow Fiber-Contained Liquid Membranes for Separations: An Overview", <i>Chemical Separations with Liquid Membranes</i> , 1996 American Chemical Society, pp. 222-238
	O'Shaughnessy, C. et al., "The Future of Separations Technology", <i>The Brewer</i> , March 1996, pp.105-110
CS	Product Brochure for trademark, HYDROBANE, Realm Products Limited of Gladstone Road, Croydon, CR0 3BQ, England

EXAMINER C Sherrer	DATE CONSIDERED 3/12/03
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EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. 06000 USA	SERIAL NO. 09/897,772
<b>INFORMATION DISCLOSURE          STATEMENT BY APPLICANT</b> (Use several sheets if necessary)		APPLICANT David Geoffrey Brown	
(37 CFR 1.98(b))		FILING DATE 06/12/2001	GROUP 1724 1761

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	CS	Swinkels, W. et al., "Recovery of CO <sub>2</sub> with Relatively High Air Content", <i>EBC Congress 1997 Maasstricht</i> , Brewing and Beverage Industry International, Issue No. 3
	I	1 <sup>st</sup> Edition Kirk-Othmer Encyclopedia of Chemical Technology, 1947, Volume 1, pp 264-288, "Alcohol, Industrial"
	I	Cote, P. et al., "Bubble-free Aeration Using Membranes: Process Analysis", <i>Journal WPCF</i> , Volume 60, Number 11, November, 1988, pp 1986-1992
	CS	Pankhania, M. et al, "Hollow Fibre Bioreactor for Wastewater Treatment Using Bubbleless Membrane Aeration", <i>Wat. Res.</i> , Vol. 28, No. 10 pp. 2233-2236, 1994

EXAMINER	C. Sherrer	DATE CONSIDERED	3/12/03
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